

CLAIMS LISTING

- 1.(currently amended) A method for the detection of small quantities of particles by the detection of antigen-antibody precipitates concentration which comprises:  
providing a sample fluid that essentially contains particles antigens with a given maximum particle size, the particles antigens having at least two antibody binding sites;  
providing a fluid containing antibodies that essentially contains particles having have a given maximum particle size;  
contacting the sample fluid with the fluid containing the antibodies, which yields a reaction fluid mixture where in the presence of particles antigens having at least two antibody binding sites the antibodies can form an antigen-antibody precipitate;  
directing a light beam through the reaction fluid mixture;  
detecting a signal by measuring with a photodetector the extinction at the light-dark boundary of the cone of light that is produced when the light generated by the laser is passing through the a measuring cell

containing the reaction fluid mixture, the signal strength depending on the size and number of antigen-antibody precipitates formed.

2.(currently amended) The A method according to claim 1, wherein the sample fluid contains particles antigens with a concentration in the order of magnitude of femtograms or attograms per liter.

3.(currently amended-withdrawn) The A method of claim 1 or 2 according to any of the preceding claims, wherein the step of providing a sample fluid that essentially contains particles antigens having a given maximum particle size comprises:

a) providing a fluid liquid,

introducing a sample component into the fluid liquid, and separating particles antigens that exceed a given particle size, in order to obtain a sample fluid that essentially contains only particles antigens having a given maximum particle size, or

b) providing a second fluid that essentially contains particles antigens having a given maximum particle size and

introducing a second sample component into the fluid liquid that essentially contains particles antigens having a given maximum particle size, in order to obtain a sample fluid that essentially contains particles antigens having a given maximum particle size.

4.(currently amended-withdrawn) The A method of claim 1 or 2 according to any of the preceding claims, wherein the separation of the particles antigens having a size exceeding the given maximum particle size is effected by filtration, the filter having a pore size of preferably 20 - 450 nm, more preferably of 100 - 300 nm, and particularly of 200 nm.

5.(currently amended) The A method of claim 1 or 2 according to any of the preceding claims, wherein antibodies comprise at least one antibody selected from a two monoclonal antibodies antibody and a or one polyclonal antibody are employed as antibodies.

6.(currently amended) The A method of claim 1 or 2 according to any of the preceding claims, wherein the antibody is

selected from the group consisting of immunoglobulin G or  
and immunoglobulin M.

- 7.(currently amended) The A method of claim 1 or 2 according to any of the preceding claims, wherein the method allows the quantity of particles antigens to be detected quantitatively or semiquantitatively.
- 8.(currently amended) The A method of claim 1 or 2 according to any of the preceding claims, wherein, at a constant concentration of antibodies, the decrease of the measured signal is directly related to the concentration of antigens.
- 9.(currently amended-withdrawn) A computer program product comprising program code means stored in a computer readable medium, for carrying out the method according to any of the claim 1 or 2 to 8 when the computer program product is executed on a computer, a network device or a device, particularly an analytical detection device.
- 10.(currently amended-withdrawn) A computer program product comprising a program code downloadable from a server, for carrying out the method according to any of the claim 1 or 2 to 8 when the computer program product is executed on a

computer, a network device or a device, particularly an analytical detection device.

11. (cancelled)

12. (cancelled)